



**PATENT**  
Attorney Docket No. 216541  
Client Reference No. 116650.5

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Forin et al.

Group Art Unit: 2126

Application No. 09/282,229

Examiner: Ho, The T.

Filed: March 31, 1999

For: A HIGHLY COMPONENTIZED SYSTEM  
ARCHITECTURE WITH OBJECT  
MUTATION

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MAY 06 2004

Technology Center 2100

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed:

- ☐ **within** any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114.
- ☒ **after** (a), (b), (c) or (d) above, but before the mailing date of a final action under 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes *one* of:
- ☐ the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below).
- or*
- ☒ the fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).
- ☐ **after** the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before payment of the issue fee, and **within** thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below).

NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed.

### Copies of the References

- ☒ Copies of all of the references listed on the enclosed Form 1449 are enclosed herewith.
- ☐ This patent application was filed after June 30, 2003. Accordingly, copies of U.S. patents and patent applications that are listed on the accompanying Form 1449 are not enclosed herewith (see Official Gazette Notice of August 5, 2003). Copies of other references identified on the accompanying Form 1449 are enclosed herewith.

- ☒ Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3).
- ☐ A copy of the foreign search report is enclosed herewith.
- ☐ The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were furnished at that time. Accordingly, additional copies of the references are not submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLICATIONS		Status ( <i>check one</i> )		
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1.				
2.				
3.				

**Statement under 37 CFR 1.97(e)**

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.
- ☐ The **undersigned** hereby states that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

**Statement under 37 CFR 1.704(d)**

- ☐ The **undersigned** hereby states that each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart application and that this communication was not received by any

In re Appln. of Forin et al.  
Application No. 09/282,229

individual designated in 37 CFR 1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.

**Fees**

- ☐ No fee is owed by the applicant(s).  
☐ The **IDS Fee of \$180** under 37 CFR 1.17(p) is enclosed herewith.

**Method of Payment of Fees**

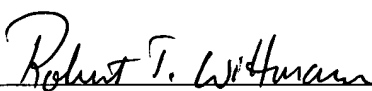
- ☐ Attached is a check in the amount of \$ .  
☒ Charge Deposit Account No. 12-1216 in the amount of \$180.00. (A duplicate copy of this communication is enclosed for that purpose.)

**Authorization to Charge Additional Fees**

- ☒ If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

**Instructions as to Overpayment**

- ☒ Credit Account No. 12-1216.  
☐ Refund

  
Robert T. Wittmann, Reg. No. 54549  
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Date: April 30, 2004

In re Appln. of Forin et al.  
Application No. 09/282,229

### CERTIFICATE OF MAILING

I hereby certify that this INFORMATION DISCLOSURE STATEMENT (along with any documents referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date: 4-30-04 Karen Hinrichs

IDS (Revised 5/21/03)

Please type a plus sign (+) inside this box →



Substitute for form 1449A/B/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number 09/282,229  
Filing Date 03/31/99  
First Named Inventor Forin et al..  
Group Art Unit 2126  
Examiner Name The T. Ho  
Attorney Docket Number 216541

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Sheet 1 of 2

## **OTHER - NON PATENT LITERATURE DOCUMENTS**

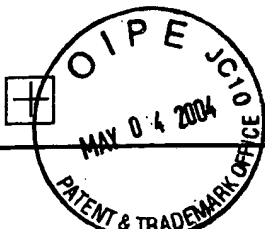
Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation	
			Yes	No**
	AA	B. Bershad, et al., "Extensibility, Safety and Performance in the Spin Operating System," <u>15th ACM Symposium on Operating System Principles, Copper Mountain Resort, Colorado, December 1995, pp. 267-284.</u>		
	AB	D. Black, et al., "Microkernel Operating System Architecture and Mach," <u>1st USENIX Workshop on Micro-Kernels and Other Kernel Architectures, Seattle, April 1992, pp. 11-30.</u>		
	AC	D. Cheriton, et al., "A Caching Model of Operating System Kernel Functionality," <u>Proceedings of the First Symposium on Operating Systems Design and Implementation, Seattle, 1994, 15 pages.</u>		
	AD	D. Cheriton, "The V Distributed System", " <u>Communications of the ACM, March 1998, Vol. 31, No. 3, pp. 314-333.</u>		
	AE	R. Draves, et al., "Unifying the User and Kernel Environments," <u>Microsoft Research Technical Report MSR-TR-97-10, March 1997, 16 pages.</u>		
	AF	D. Engler, et al., "Exokernel: An Operating System Architecture for Application-Level Resource Management," <u>15th ACM Symposium on Operating System Principles ACM SIGOPS, Copper Mountain Resort, Colorado, December 1995, pp. 251-266.</u>		
	AG	B. Ford, et al., "The Flux OSKit: A Substrate for Kernel and Language Research," <u>Proceedings of the 16th ACM Symposium on Operating Systems Principles, ACM SIGOPS, Saint-Malo, France, October 1997, pp. 38-51.</u>		
	AH	D. Golub, et al., "UNIX as an application program," <u>USENIX 1990 Summer Conference, Anaheim, CA, June 1990, pp. 87-95.</u>		
	AI	J. Helander, "Unix Under Mach: The Lites Server," <u>Master's Thesis, Helsinki University of Technology, 1994, 71 pages.</u>		
	AJ	D. Hildebrand, "An Architectural Overview of QNX," <u>1st USENIX Workshop on Micro-kernels and Other Kernel Architectures, Seattle, April 1992, pp. 113-126.</u>		
	AK	M. Jones, et al., "An Overview of the Rialto Real-Time Architecture," <u>Proceedings of the Seventh ACM SIGOPS European Workshop, SIGOPS, September 1996, pp. 249-256.</u>		
	AL	M. Jones, et al., "CPU Reservations and Time Constraints: Efficient, Predictable Scheduling of Independent Activities," <u>Proceedings of the 16th ACM Symposium on Operating System Principles, ACM SIGOPS, Saint-Malo, France, October 1997, pp. 198-211.</u>		
	AM	M. Jones, The Microsoft Interactive TV System: An Experience Report, Microsoft Research Technical Report MSR-TR-97-18 [online], July 1997, 24 pages, Retrieved January 26, 2000 from the Internet at <a href="http://www.research.microsoft.com/research/os/mbj/papers/mitv/tr-97-18.html">http://www.research.microsoft.com/research/os/mbj/papers/mitv/tr-97-18.html</a> .		
	AN	D. Julin, et al., "Generalized Emulation Services for Mach 3.0 Overview, Experiences and Current Status," <u>Proceedings of the Usenix Mach Symposium USENIX Association, 1991, pp. 13-26.</u>		

Examiner Signature	Date Considered
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\* A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

Please type a plus sign (+) inside this box →



Substitute for form 1449A/B/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	09/282,229
Filing Date	March 31, 1999
First Named Inventor	Forin et al.
Group Art Unit	2126
Examiner Name	The T. Ho
Attorney Docket Number	216541

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## **OTHER - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials	Doc. No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Translation
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	A O	D. Lee, et al., "Execution Characteristics of Desktop Applications on Windows NT," <u>Proceedings of the 25th International Symposium on Computer Architecture, IEEE, Barcelona, Spain, June 1998, pp. 27-38.</u>		
	A P	J. Liedtke, "On $\mu$ -Kernel Construction," <u>15th ACM Symposium on Operating System Principles, ACM, Copper Mountain Resort, Colorado, December 1995, pp. 237-250.</u>		
	A Q	J. Mogul, et al., "The Packet Filter: An Efficient Mechanism for User-level Network Code," <u>11th ACM Symposium on Operating System Principles, ACM, November 1987, 34 pages.</u>		
	A R	R. Rashid, "From RIG to Accent to Mach: The Evolution of a Network Operating System," <u>Carnegie-Mellon University Technical Report, August 1987, pp. 1128-1137.</u>		
	A S	M. Rozier, et al., "CHORUS Distributed Operating System," <u>Computing Systems, Fall 1998, Vol. 1, no. 4, pp. 305-370.</u>		
	A T	Torborg, Jay, et al., "Talisman: Commodity Realtime 3D Graphics for the PC," <u>Proceeding of SIGGRAPH96, ACM, August 1996, pp. 353-363.</u>		
	A U	M. Young, "Exporting a User Interface to Memory Management from a Communication-Oriented Operating System," <u>Ph.D. Thesis CMU-CS-89-202, Carnegie-Mellon University, November 1989, 206 pages.</u>		

## **U.S. PATENT DOCUMENTS**

Examiner Initials	Doc. No.	U.S. Patent Document		Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
		Application or Patent Number	Kind Code			
	A V	09/282,238	A1	Forin et al.		03/31/1999
	A W	09/283,227	A1	Forin et al.		03/31/1999
	A X	09/283,818	A1	Forin et al.		03/31/1999
	A Y	09/392,405	A1	Forin et al.		09/09/1999
	A Z	09/282,656	A1	Forin et al.		03/31/1999

Examiner Signature		Date Considered	
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